

CLAIMS

I claim:

1. A mat for dispensing volatile vapors, comprising:

5 a substrate having a first substrate portion and a second substrate portion, the first substrate portion having applied thereto a first volatile material, the volatile material comprising an active selected from the group consisting of insect control agents, fragrances, deodorizers, and combinations thereof, and the second substrate portion having applied thereto a second volatile material, the volatile material comprising an active selected from the group consisting of insect control agents, fragrances, deodorizers, and combinations thereof, wherein the substrate is made of a porous material that is sufficiently heat sensitive so as to melt when contacted by a hot forming die but also sufficiently heat resistant so as to be suitable to be used in the presence of heat from a heater; and

15 a moat which extends at least partially into the substrate and defines the first substrate portion and the second substrate portion, the moat having been formed by pressing a portion of an upper wall of the substrate with a hot forming die.

20 2. The mat of claim 1, wherein the moat is positioned radially outward of the first substrate portion and the second substrate portion is positioned radially outward of the moat.

3. The mat of claim 1, wherein the first substrate portion is radially centrally positioned in the substrate.

25 4. The mat of claim 1, wherein pores along moat walls are closed due to melting of the substrate material caused by the hot forming die, thereby leading to the formation of a barrier along moat walls, which inhibits bleeding of the first volatile material from the first substrate portion to the second substrate portion.

30 5. The mat of claim 1, wherein the substrate is made of a plastic material.

6. The mat of claim 5, wherein the plastic material is polyethylene.

7. The mat of claim 1, wherein the substrate is made of a material that is sufficiently heat resistant so as to be essentially resistant to melting at a temperature of 160°C or less.

5 8. The mat of claim 1, wherein the substrate is made of a material that is sufficiently heat resistant so as to be essentially resistant to melting at a temperature of 180°C or less.

10 9. The mat of claim 1, wherein the substrate is made of a material that is sufficiently heat sensitive so as to melt to form the moat when pressed by a hot forming die at an operating temperature of 200°C and above.

15 10. The mat of claim 1, wherein the first volatile material and the second volatile material are the same.

11. The mat of claim 1, wherein the first volatile material and the second volatile material are the different.

20 12. The mat of claim 11, wherein the first volatile material has an active that is not present in the second volatile material.

13. The mat of claim 11, wherein the second volatile material has an active that is not present in the first volatile material.

25 14. The mat of claim 11, wherein the first volatile material has at least one active that is the same as an active in the second volatile material but that active is present at a different concentration in the first volatile material than in the second volatile material.

30 15. The mat of claim 11, wherein the first volatile material has at least one active that is the same as an active in the second volatile material but the remainder of the first volatile material is not completely identical to the remainder of the second volatile material.

16. A method for controlling insects, comprising:
obtaining a mat having:

5 a substrate having a first substrate portion and a second substrate portion, the first substrate portion having applied thereto a first volatile material, the volatile material comprising an active selected from the group consisting of insect control agents, fragrances, deodorizers, and combinations thereof, and the second substrate portion having applied thereto a second volatile material, the volatile material comprising an active selected from the group consisting of insect control agents, fragrances, deodorizers, and combinations thereof, wherein the substrate is made of a porous material that is sufficiently heat sensitive so as to melt when contacted by a hot forming die but also sufficiently heat resistant so as to be suitable to be used in the presence of heat from a heater; and

10 a moat which extends at least partially into the substrate and defines the first substrate portion and the second substrate portion, the moat having been formed by pressing a portion of an upper wall of the substrate with a hot forming die; placing the mat on a heater; and

15 heating the mat to thereby cause the volatile material applied to the first substrate portion and the volatile material applied to the second substrate portion to dispense.

20 17. The method of claim 16, wherein the mat is heated to a temperature from about 145°C to about 180°C to cause the volatile materials to dispense.

18. A method of constructing a dispensing mat, the method comprising:
obtaining a slab of a porous substrate material that is sufficiently heat sensitive
so as to melt when contacted by a hot forming die but also sufficiently heat resistant
so as to not significantly melt in the presence of heat from a heater;

5 pressing a portion of the slab with a hot forming die to form a moat wherein
the moat extends at least partially into the slab and defines a first slab portion and a
second slab portion;

depositing a volatile material on the first portion of the slab; and

depositing a volatile material on the second portion of the slab.

10 19. The method of claim 18, wherein a portion of the slab is pressed with a
hot forming die at an operating temperature of 200°C or above.